

ing notes of travel and sport, largely ornithological. Over 1000 specimens were taken, representing about 125 species of birds and 15 species of mammals.

About 50 pages are devoted to 'Ornithological Sketches from Spain,' and relate mainly to Vultures and Eagles, of which eight or nine species are more or less formally treated. 'Ornithological Sketches from the East' seems to be a systematic, annotated list of the birds observed during the 'Journey in the East' mentioned above.

The numerous minor papers give notes on birds observed in the vicinity of Vienna, during January 1 to June 1, 1882, November, 1883, February, 1884, and December, 1885, and include two papers on 'Hybrid Grouse,' and an annotated list of birds observed on the coast of Dalmatia and Istria. An excellent index concludes this very entertaining book of nearly 650 pages.—J. A. A.

Doan's Birds of West Virginia.*—The writer of this list spent the time from August 1 until November, 1888, travelling through the State stopping for a few days each at some fifteen different places. He says:—"During the last five weeks in the field the inclemency of the weather was such that it was impossible for me to do any collecting whatever; and as the season was far advanced and the remaining time short, my explorations were necessarily hurried. Much valuable time was lost in travelling in order to reach all the different districts, many of which are widely separated and remote from railroads. By far the most productive and satisfactory work was done at Buckhannon and vicinity during the month of August. The following list [of 200 species] contains all species that I personally identified, together with a few additions from Mr. William Brewster's paper on the 'Birds of Ritchie County,' and W. E. D. Scott's 'Birds of Kanawha County.'" He also acknowledges his "indebtedness to Dr. J. R. Mathers and Mrs. E. L. Day, of Buckhannon, for valuable notes on several species with which I did not meet." In spite of the fact that his field work was all done later than August 1, the author does not hesitate to enter many species as summer residents, and in the same bold spirit he gives others as winter residents, either at a guess, or upon some authority which he does not quote. Among all these unreliable statements are one or two records that would be valuable, if we dared believe them. There are others that are quite easy to believe, as the assertion that the Woodcock is "a lover of low damp places," or that "Turkey Buzzards feed upon carrion and are very useful birds."

Cynical readers may be amused to notice that, according to the author's observations, "in eastern Pennsylvania" various of the insect-eating species still adhere with surprising fidelity to the diet prescribed for them some years ago by Mr. T. G. Gentry.

* Bulletin No. 3, of the West Virginia Agricultural Experiment Station at Morgantown, W. Va., December, 1888, — Prepared under the Auspices of the West Virginia Agricultural Experiment Station. By Wm. D. Doan. — John A. Myers, Director. Birds of West Virginia. 8vo pp. 41-88.

What object there can have been in publishing such a worthless production as this (10,000 copies were distributed), it is hard to imagine. We notice it chiefly to call attention to the folly and uselessness of issuing local lists that are based on few and imperfect observations. Every beginner in ornithology seems beset by a desire to print a list of the birds of his own neighborhood, and thinks himself quite competent for the task. The fact is there are few things that require such long training and exceptional talents to make the results of real value. Even then a list should not be published unless based on years of constant field-work or unless the region treated is practically unknown ground. It is, nevertheless, an excellent thing for the beginner to prepare his local list,—but for his own use. It gives him some valuable practice; its incompleteness may stimulate him to further discoveries; and it will doubtless afford him that most invaluable lesson,—how easy it is to make mistakes, and many of them.—C. F. B.

The Quadrate Bone in Birds.*—A paper by Miss Mary L. Walker treats of the quadrate bone of birds, describing one or more specimens from typical examples of each of the various groups proposed by Huxley. The quadrate is shown to have a characteristic shape in the different species examined, and from hastily running over a considerable number of crania it is apparent that the quadrate possesses much taxonomic importance. Its value, however, will doubtless prove to be comparative rather than positive, and will be found in the fact that it furnishes an additional point in summing up the evidence in any given case. Some of the facts brought forward in the paper show very clearly that, like most characters of birds, the form of the quadrate will need to be checked by others, and that, as has so often been said, it is not by any one character, but by the resultant of many, that birds must be classified. None of the *Machrochires* were examined by Miss Walker, and it may be said that the quadrate of Hummingbirds, Swifts, and Goatsuckers are built on the same general plan, the resemblance between Swifts and Goatsuckers in this particular being especially noticeable. The paper is confessedly "a short, and indeed, preliminary study," and it is to be hoped that we may soon see it extended, for we cannot have too many aids in the classification of birds, and each additional taxonomic character is to be welcomed.—F. A. L.

Minor Ornithological Publications.—There has not been much of ornithological interest in the literary monthlies since they were last noticed in this department. *Harper's Monthly* since Vol. LXXI (see Auk, 11, 372) has contained nothing in Vols. LXXII-LXXIX worth noticing here. *Scribner's Magazine* has so far (Vol. I-VI) contained no ornithological matter. *The Century Magazine* was last noticed (Vol. XXVI, 1883) in the

*Studies from the Museum of Zoölogy in University College, Dundee. Edited by D'Arcy W. Thompson, Professor. I. On the Form of the Quadrate Bone in Birds. By Mary L. Walker.